

WHAT IS CLAIMED IS:

1. An antimicrobially active peptide, wherein it comprises the DCD protein of SEQ ID No: 1 or a DCD fragment preferably derived from the C-terminal region.
2. The peptide as claimed in claim 1, wherein the fragment comprises a maximum of 50 amino acid residues from the C-terminal region of DCD.
3. The peptide as claimed in claim 1, wherein it comprises the amino acid residues 63-110 of DCD (SEQ ID No: 2).
4. The peptide as claimed in claim 2, wherein it comprises the amino acid residues 63-110 of DCD (SEQ ID No: 2).
5. The peptide as claimed in claim 1, wherein it comprises the amino acid residues 63-109 of DCD (SEQ ID No: 3).
6. The peptide as claimed in claim 2, wherein it comprises the amino acid residues 63-109 of DCD (SEQ ID No: 3).
7. The peptide as claimed in claim 1, wherein, compared with the corresponding position in DCD, at least one amino acid residues is exchanged for an amino acid residues of the same group.
8. An antimicrobially active peptide which comprises an amino acid sequence homologous to the peptide as claimed in claim 1 and shows a comparable antimicrobial effect.
9. The peptide as claimed in claim 1, wherein it has at least one post-translational modification.
10. The peptide as claimed in claim 1, wherein it is connected to a further peptide or protein to give a fusion protein.
11. The peptide as claimed in claim 10, wherein the further peptide or protein is selected from the group consisting of: signal peptide, reporter protein, histidine tags, and antigenic determinants.
12. A nucleic acid molecule comprising a sequence segment encoding a peptide as claimed in claim 1.
13. A nucleic acid molecule comprising a sequence segment encoding a peptide as claimed in claim 2.

14. A nucleic acid molecule comprising a sequence segment encoding a peptide as claimed in claim 3.

15. A nucleic acid molecule comprising a sequence segment encoding a peptide as claimed in claim 4.

16. A nucleic acid molecule comprising a sequence segment encoding a peptide as claimed in claim 5.

17. A nucleic acid molecule comprising a sequence segment encoding a peptide as claimed in claim 6.

18. An expression vector comprising the nucleic acid molecule as claimed in claim 12 and, where appropriate, control sequences, in particular for replication, transcription and/or translation.

19. An expression vector comprising the nucleic acid molecule as claimed in claim 13 and, where appropriate, control sequences, in particular for replication, transcription and/or translation.

20. An expression vector comprising the nucleic acid molecule as claimed in claim 14 and, where appropriate, control sequences, in particular for replication, transcription and/or translation.

21. An expression vector comprising the nucleic acid molecule as claimed in claim 15 and, where appropriate, control sequences, in particular for replication, transcription and/or translation.

22. An expression vector comprising the nucleic acid molecule as claimed in claim 16 and, where appropriate, control sequences, in particular for replication, transcription and/or translation.

23. An expression vector comprising the nucleic acid molecule as claimed in claim 17 and, where appropriate, control sequences, in particular for replication, transcription and/or translation.

24. A host cell which is transfected or transformed with the expression vector as claimed in claim 18.

25. A host cell which is transfected or transformed with the expression vector as claimed in claim 19.

26. A host cell which is transfected or transformed with the expression vector as claimed in claim 20.

27. A host cell which is transfected or transformed with the expression vector as claimed in claim 21.

28. A host cell which is transfected or transformed with the expression vector as claimed in claim 22.

29. A host cell which is transfected or transformed with the expression vector as claimed in claim 23.

30. A method for protecting and/or treating human skin against microorganisms, comprising the step of administering the peptide as claimed in claim 1.

31. A method for protecting and/or treating human skin against microorganisms, comprising the step of administering the peptide as claimed in claim 2.

32. A method for protecting and/or treating human skin against microorganisms, comprising the step of administering the peptide as claimed in claim 3.

33. A method for protecting and/or treating human skin against microorganisms, comprising the step of administering the peptide as claimed in claim 4.

34. A method for protecting and/or treating human skin against microorganisms, comprising the step of administering the peptide as claimed in claim 5.

35. A method for protecting and/or treating human skin against microorganisms, comprising the step of administering the peptide as claimed in claim 6.

36. A pharmaceutical composition which comprises as active ingredient a peptide as claimed in claim 1 in an antimicrobially effective amount.

37. A pharmaceutical composition which comprises as active ingredient a peptide as claimed in claim 2 in an antimicrobially effective amount.

38. A pharmaceutical composition which comprises as active ingredient a peptide as claimed in claim 3 in an antimicrobially effective amount.

39. A pharmaceutical composition which comprises as active ingredient a peptide as claimed in claim 4 in an antimicrobially effective amount.

40. A pharmaceutical composition which comprises as active ingredient a peptide as claimed in claim 5 in an antimicrobially effective amount.

41. A pharmaceutical composition which comprises as active ingredient a peptide as claimed in claim 6 in an antimicrobially effective amount.

42. A cosmetic composition which comprises as active ingredient a peptide as claimed in claim 1 in an antimicrobially effective amount.

43. A cosmetic composition which comprises as active ingredient a peptide as claimed in claim 2 in an antimicrobially effective amount.

44. A cosmetic composition which comprises as active ingredient a peptide as claimed in claim 3 in an antimicrobially effective amount.

45. A cosmetic composition which comprises as active ingredient a peptide as claimed in claim 4 in an antimicrobially effective amount.

46. A cosmetic composition which comprises as active ingredient a peptide as claimed in claim 5 in an antimicrobially effective amount.

47. A cosmetic composition which comprises as active ingredient a peptide as claimed in claim 6 in an antimicrobially effective amount.